

MATERIAL SAFETY DATA SHEET

Agent: Apex Flavors
Manufacturer: Apex Flavors
Address: 1361 Brass Mill Rd. Suite E, Belcamp, MD 21017
Phone: 410-565-6600
Emergency Phone Number: Chemtrec: 1-800-424-9300

Section 1 Chemical Identification

Blueberry Type, Natural Flavor Blend (Propylene Glycol Free) # 1086PGF

Section 2 Composition/Information of Ingredients

CAS#: Proprietary Formula

Fema#: NA

EINECS#: NA

Molecular: NA

Chemical Name: NA

Synonyms: None

Section 3 First-Aid Measures

Eye Contact Aid: Flush immediately with clean cold water. If irritation persists, call a physician.

Skin Contact Aid: Thoroughly wash the affected area with soap and water. Flush with large quantities of water. If irritation persists, call a physician.

Inhalation Aid: Remove individual to fresh air, contact physician if necessary.

Ingestion Aid: Administer water or milk to dilute. Contact a physician or local poison control.

Section 4 Fire Fighting Measures

Extinguishing Media: CO2; Foam; Dry Chemical

Special Fire Fighting Procedures: Wear protective clothing to prevent contact with skin and eyes.

Unusual Fire and Explosive Hazards: Not Established

Section 5 Accidental Release Measures

Procedure: Remove any source of flame or sparks. If in a confined area, NIOSH approved respiratory protection may be required. Remove individuals from area if they do not have respiratory/dust protection. Spray material with water to prevent dusting and remove to an approved disposal container. Follow Federal, State and Local procedures for cleaning up of powder. Dispose in accordance with current laws and regulations.

Section 6 Handling and Storage

Storage/Handling: This product should be stored in tightly closed, full container in a cool, dry area away from direct sunlight. Before opening and handling this flavor, consult your workplace safety officer and MSDS.

Section 7 Exposure Controls/Personal Protection

Eyes: The use of goggles and a face shield is recommended.

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- Respiratory:** Respiratory protection is normally not required in well ventilated areas. However, NIOSH approved respiratory protection may be required when the material is rated toxic by inhalation or if the material is to be used in a confined area.
- Other Protective Devices:** Chemical resistant gloves are recommended (i.e. Nitrile gloves)
- Ventilation:** Ventilation meeting ACGIH Standards should be employed.
- Work/Hygienic Practices:** Use good personal hygiene practices. Limit exposure to product whenever possible. Wash any contaminated clothing or shoes before each use.

Section 8 Physical and Chemical Properties

- Appearance and Odor:** A colorless to light yellow liquid. Characteristic of blueberry.
- Hazardous Ingredients:** Ethyl alcohol (CAS# 64-17-5), isoamyl alcohol (CAS# 123-51-3), and acetoin (CAS #513-86-0).
- Boiling Point (Deg C):** NA
- Melting Point (Deg C):** NA
- Vapor Density:** NA
- Vapor Pressure:** NA
- Specific Gravity (@ 20 C):** 1.0130 to 1.0430
- Specific Gravity (@ 25 C):** 1.0100 to 1.0400
- Refractive Index (@ 20 C):** 1.3697 to 1.3997
- Solubility Water:** Soluble
- Solubility Fat:** Insoluble
- Flash Point:** 78 F. / 26 C.
- Flammability (solid,gas):** NA
- Autoflammability:** NA
- Explosive Properties:** NA
- Oxidizing Properties:** NA

Section 9 Stability and Reactivity

- Hazardous Polymerization:** Will not occur
- Hazardous Decomposition Products:** None
- Materials and/or Conditions to avoid:** None
- Stability:** Stable

Section 10 Toxicological Information

- Threshold Limit Value (ACGIH TLV):** None Established
- Threshold Limit Value (OSHA PEL):** None Established
- Carcinogenicity:**
- NTP Monograph:** None Established
- ARC Monograph:** None Established
- Acute Toxicity Data:**
- Oral LD50:** None Established
- Dermal LD05:** None Established
- Inhalation LC50:** None Established

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Health Hazards (Acute and Chronic):

Ingestion of large quantities:	None Established
Inhalation:	None Established
Skin Contact:	Liquid may be irritating
Eye Contact:	Liquid may be irritating
Note:	The above effects are based on evaluation of individual components.
Other Effects:	None Established

Section 11 Ecological Information

Biodegradability:	Not Determined
Aquatic Toxicity:	Not Determined
Bioaccumulation Potential:	Not Determined

Section 12 Transport Information

Proper Shipping Name: EXTRACTS, FLAVOURING, LIQUID

UN#: 1197

UN Pkg Group: III

ERG#: 127

Air/Steamer Transport Information:

Air: 3

Steamer: 3

Required Labels: FLAMMABLE LIQUID

Section 13 Other Information

Hazardous Materials Identification System

Health: 1	Flammability: 2	Reactivity: 0	Personal Protection: B	
4-Extreme	3-High	2-Moderate	1-Slight	0-No Significant Hazard

Section 14 Regulatory

R-Phase: 11-36/38-65

S-Phase: 23-26-36-39-62

Section 15 Conclusion

The information contained herein is based on data considered accurate and reliable. However, the data is provided without any warranty, expressed or implied regarding its correctness or accuracy. It is the user's responsibility both to determine safe conditions for use of this product, and to assume any liability for loss, injury, damage or expense resulting from the improper use of this product.

Section 16 Disclaimer

Our ingredients have not been tested, nor have they been determined safe, for inhalation or use in any electronic smoking devices, electronic nicotine delivery systems, electronic cigarettes, or other similar devices (collectively "E-Cigarettes") or in any E-Liquids used with E-Cigarettes. By receiving Apex Flavors, Inc. ingredients, the recipient confirms that they will not use these ingredients in connection with the manufacture and distribution of E-Cigarettes, E-Liquids or any component thereof. WE DISCLAIM, TO THE FULLEST EXTENT PERMITTED BY LAW, ALL WARRANTIES, EXPRESS OR IMPLIED, and disclaim all liability in connection with the use of our ingredients in connection with E-Cigarettes and E-Liquids. All such risks are assumed by you and the user.